(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 11 May 2006 (11.05.2006)

(10) International Publication Number WO 2006/048735 A1

- (51) International Patent Classification: *B60K 6/04* (2006.01) *B60W 20/00* (2006.01)
- (21) International Application Number:

PCT/IB2005/003269

(22) International Filing Date:

1 November 2005 (01.11.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2004-319165

2 November 2004 (02.11.2004) JP

- (71) Applicant (for all designated States except US): NISSAN MOTOR CO., LTD. [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0023 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): OHNO, Takeshi [JP/JP]; 267-30-201 Kamayacho, Hodogaya-ku, Yokohama-shi, kanagawa 240-0063 (JP).
- (74) Agent: SIEFFERT, Kent, J.; Shumaker & Sieffert, P.A., 8425 Seasons Parkway, Suite 105, St. Paul, MN 55125 (US).

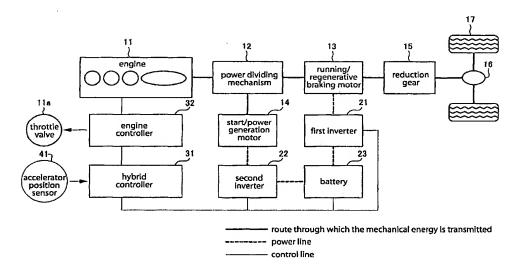
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN ENGINE START CONTROL DEVICE AND METHOD FOR A HYBRID VEHICLE



(57) Abstract: An engine start control device for a hybrid vehicle equipped with an electric motor (13) and an engine (11) with an induction system, including a hybrid controller (31) that performs an engine start determination to determine whether the engine (11) should be started while the electric motor (13) is running; an acceleration position sensor (41) that detects an acceleration demand during the engine start determination; and a start/power generation motor (14) that starts the engine (11), wherein the start/power generation motor (14) controls the pressure in the induction system based on acceleration demand, in particular by operating a throttle valve (11a).